



- (51) International Patent Classification:  
*H04N 13/00* (2006.01)
- (21) International Application Number:  
PCT/US2013/046407
- (22) International Filing Date:  
18 June 2013 (18.06.2013)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
13/552,370 18 July 2012 (18.07.2012) US
- (71) Applicant: **QUALCOMM INCORPORATED** [US/US];  
ATTN: International IP Administration, 5775 Morehouse  
Drive, San Diego, California 92121-1714 (US).
- (72) Inventors: **DANE, Gokce**; 5775 Morehouse Drive, San  
Diego, California 92121-1714 (US). **BHASKARAN, Vas-  
udev**; 5775 Morehouse Drive, San Diego, California  
92121-1714 (US).
- (74) Agent: **ERICKSON, Bryan F.**; Shumaker & Sieffert,  
P.A., 1625 Radio Drive, Suite 300, Woodbury, Minnesota  
55125 (US).
- (81) Designated States (*unless otherwise indicated, for every  
kind of national protection available*): AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,  
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,  
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,  
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR,  
KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,  
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,  
OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC,  
SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,  
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every  
kind of regional protection available*): ARIPO (BW, GH,  
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,  
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,  
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,  
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,  
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SL,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
KM, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: CROSSTALK REDUCTION WITH LOCATION-BASED ADJUSTMENT IN MULTIVIEW VIDEO PROCESSING

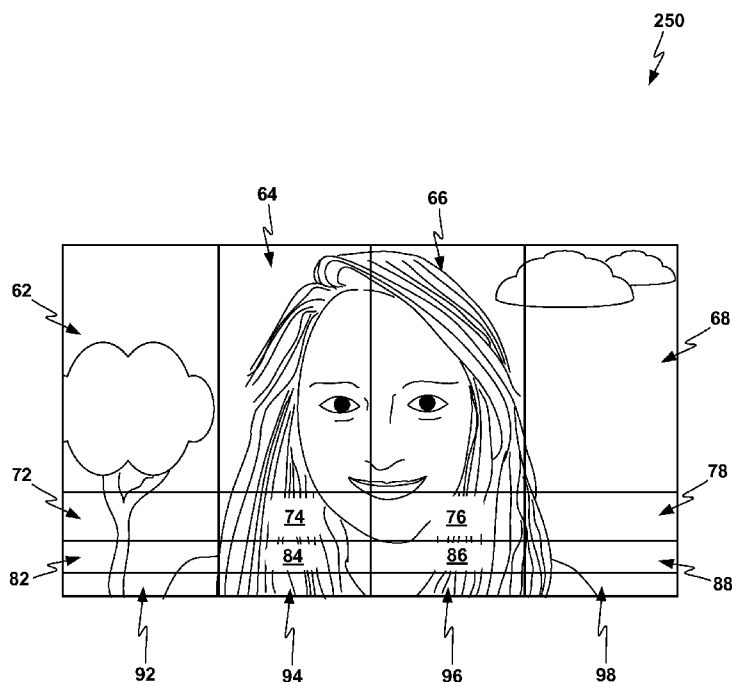


FIG. 14

(57) Abstract: In one example, a method includes identifying a pixel in an image frame that is a candidate for causing crosstalk between the image frame and a corresponding image frame in a multiview image system. The method further includes, for a pixel identified as a candidate for causing crosstalk, applying crosstalk correction to the pixel. The method further includes applying a location-based adjustment to the pixel, wherein the location-based adjustment is based at least in part on which of two or more portions of the image frame the pixel is in.

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

**(88) Date of publication of the international search report:**  
4 September 2014

**Published:**

- with international search report (Art. 21(3))

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2013/046407

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. H04N13/00  
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EP0-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                                           | Relevant to claim No. |
|-----------|------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| X         | WO 2012/046687 A1 (SHARP KK [JP]; WATANABE TATSUO; MAEDA KENJI)<br>12 April 2012 (2012-04-12)<br>the whole document<br>----- | 1-42                  |
| A         | JP H08 331600 A (SANYO ELECTRIC CO)<br>13 December 1996 (1996-12-13)<br>paragraph [0024] - paragraph [0034]<br>-----         | 1-42                  |
| A         | US 2006/268104 A1 (COWAN MATT [CA] ET AL)<br>30 November 2006 (2006-11-30)<br>paragraph [0056] - paragraph [0096]<br>-----   | 1-42                  |



Further documents are listed in the continuation of Box C.



See patent family annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

17 July 2014

Date of mailing of the international search report

24/07/2014

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040,  
Fax: (+31-70) 340-3016

Authorized officer

Penchev, Petyo

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2013/046407

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date         |
|-------------------------------------------|---------------------|----------------------------|-----------------------------|
| WO 2012046687                             | A1                  | 12-04-2012                 | NONE                        |
| -----                                     |                     |                            |                             |
| JP H08331600                              | A                   | 13-12-1996                 | JP 3096614 B2 10-10-2000    |
|                                           |                     |                            | JP H08331600 A 13-12-1996   |
| -----                                     |                     |                            |                             |
| US 2006268104                             | A1                  | 30-11-2006                 | EP 1883835 A2 06-02-2008    |
|                                           |                     |                            | EP 2501139 A2 19-09-2012    |
|                                           |                     |                            | JP 5363101 B2 11-12-2013    |
|                                           |                     |                            | JP 2009507401 A 19-02-2009  |
|                                           |                     |                            | JP 2013123258 A 20-06-2013  |
|                                           |                     |                            | KR 20080039848 A 07-05-2008 |
|                                           |                     |                            | US 2006268104 A1 30-11-2006 |
|                                           |                     |                            | US 2007188602 A1 16-08-2007 |
|                                           |                     |                            | US 2011025832 A1 03-02-2011 |
|                                           |                     |                            | WO 2006128066 A2 30-11-2006 |
| -----                                     |                     |                            |                             |